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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,474	10/28/2003	Tomonori Gotoh	FUJS 20.713	5600

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EXAMINER	
RIVAS, SALVADOR E	

ART UNIT	PAPER NUMBER
2619	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/695,474	GOTOH ET AL.	
	Examiner	Art Unit	
	Salvador E. Rivas	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-5, and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's amendments filed on November 30, 2007. **Claims 1, 3-5, and 8** are now pending in the present application. **This Action is made Final**.

Drawings

2. The drawings were received on November 30, 2007. These drawings are acceptable.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 1**, the phrase "... *the transmission path port connected ...*" (page 3 line 16 of claim 1) renders the claim indefinite. For instance, the applicant has already established that the transmitter may be composed of many transmission path ports (Page 3 Lines 10-11 of Claim 1) and not a particular port as it is stated on line 16 of page 3. Therefore the addition of the phrase "... *the transmission path port connected ...*" to an otherwise definite expression extends the scope of the expression so as to render it indefinite (Ex *parte Copenhaver,* 109 USPQ 118 (Bd. App. 1955)). See MPEP §2173.05 (b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over by admitted prior art (**U.S. Patent Application Publication #2004/0085966 A1**) in

view of **Xu et al. (U.S. Patent Application Publication #2002/0114333 A1)** and further in view of **Bryden et al. (U.S. Patent # 6,717,944 B1)**.

Regarding **claims 1 and 8**, the admitted prior art teach a transmitter (Fig.13 @ 1-1) in a network where a plurality of transmitters have an individual specific address (Fig.13) and are connected through different transmission paths so that a packet with information about a source address is transmitted, said transmitter (Fig.15) comprising: a plurality of transmission path ports respectively connected to said different transmission paths for receiving said packet (Fig.15 @ 111, 121, 131, 141); and a relay section for relaying the received packet to a relay transmission path of said transmission paths by which said received packet reaches its destination(Fig.15 @ 160); wherein said relay section comprises: a table for storing information about the relay of said received packet to one of said transmission path ports connected to said relay transmission path, correlated with a port identifier of each said transmission path port and the source address of the transmitter that transmitted said packet (read as table register, Fig.15 @ 180, used for storing "...a transmitting port number for relaying data for each destination address.", paragraph [0017] Lines 6-8); and a router (read as routing processing unit, Fig.15 @ 170). However, the admitted prior art fails to teach a router for extracting the port identifier of the transmission path port that received said packet and said source address contained in said received packet, and routing said received packet to the transmission path port connected to said relay transmission path by referring to said table for said extracted port identifier and source address, wherein said router comprises: a receiving port extracting part for extracting the receiving port

identifier of the transmission path port that received said packet; a source address extracting part for extracting the source address contained in said received packet; and a routing part for performing said routing by referring to said table in response to said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part, wherein said routing part comprises: a judging part for judging whether or not to relay said received packet by referring to said table, based on said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part; and an assigning part for assigning said received packet to a transmission path port when it is judged by said judging part that said received packet is relayed.

Xu et al. teach a device (read as call control manager (Fig. 1 @ 36), Paragraph [0042] Lines 2-6) for sending datagrams representing real time streaming media frames to a client independent of whether the client is served by a network address proxy. For instance, Xu et al.'s teach a "call control manager 36 can extract a source network address and a source port number from datagrams originated by client 16 (and translated by NAT server 28) to identify a destination network address and port number to which datagrams can be sent ..." (Paragraph [0042]). Also, Xu et al.'s call control manager (Fig.1 @ 36) can be coupled with a directory server (Fig. 1 @ 38) that "... maintains a client table database 42 that associates each client 14, 16, and 18 to a client identifier that is stable and to a network address currently assigned to the client. " (Paragraph [0040] Lines 8-11) Furthermore, the call control manager maintains a

session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the call control manager and directory server capability of extracting certain datagram parameters as taught by Xu et al. with transmitter from the admitted prior art for the purpose of enhancing the efficiency and quality of transmission of data packets in a network.

However, Xu et al. and the admitted prior art fail to teach a judging part for judging whether or not to relay said received packet by referring to said table, based on said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part; and an assigning part for assigning said received packet to a transmission path port when it is judged by said judging part that said received packet is relayed. Bryden et al. teach Frame Relay devices that allow for the transferring of data packets over an Internet Protocol network using a Virtual Private Network. For instance, Bryden et al. teaches "Upon receiving the unicast protocol message from the source CPE node (402) over the local Frame Relay virtual circuit, the local edge node (404) searches its forwarding table to determine the IP tunnel corresponding to the DLCI, and forwards the unicast protocol message to the remote edge node (408) over the IP tunnel." (Column 7 Lines 20-27) Furthermore, Bryden et al.'s teach the remote edge node (412) comparing the receiving protocol message in its "... forwarding table to determine the IP tunnel corresponding to the

Frame Relay virtual circuit (DLCI), and drops the unicast protocol message upon determining that there is no IP tunnel corresponding to the Frame Relay virtual circuit (DLCI)." (Column 8 Lines 22-27). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the logic of the remote edge node of Bryden et al. with certain extracted parameters from the packet headers as taught by Xu et al. with the system of the admitted prior art for the purpose of efficiently establishing data packet transmission control.

Regarding **claim 3**, and **as applied to claim 1 above**, the admitted prior art, as modified by Xu et al. and Bryden et al., teaches the transmitters wherein, as said information about the relay of said received packet correlated with said receiving port identifier and said source address, said table (read as a table register, Fig.15 @ 180) stores both information that said received packet is not relayed if it circulates within said network, and information that said received packet is relayed if it does not circulate within said network (Fig.15 @ 180 " stores...data", paragraph [0017], 6-7).

Regarding **claim 4**, and **as applied to claim 3 above**, the admitted prior art, as modified by Xu et al. and Bryden et al., teaches the transmitters wherein said network has a mesh path or ring path through which said received packet can circulate (Fig.13).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over by admitted prior art (**U.S. Patent Application Publication #2004/0085966 A1**) in view of **Xu et al.** (**U.S. Patent Application Publication #2002/0114333 A1**) and further view of **Bryden et al.** (**U.S. Patent # 6,717,944 B1**) and **Yonekura** (**U.S. Patent Application Publication #2002/0087730 A1**).

Regarding **claim 5**, and **as applied to claim 1 above**, the admitted prior art, as modified by Xu et al. and Bryden et al., teaches the transmitters wherein in the case where a path to a destination transmitter is divided into a plurality of paths and has a redundant structure (as read by the ring topology in Fig.13, where the "counter-rotating ring" forms a redundant topology), said received packet is routed by said router (read as routing processing unit, Fig.15 @ 170). However, the admitted prior art, as modified by Xu et al., fails to teach the transmission path ports to relay said received packet are assigned in said table so that many of them are not relayed only to a specific path forming said redundant structure.

Yonekura teaches a content relay device (Fig.1 @ 10a) that "...regards users of the portable telephone sets 20a as service target members, and manages a name, a contact address, authentication information, and the like, for each member in a member information database." (Paragraph [0040] Lines 9-14) Therefore, it would have been obvious to a person of ordinary skill in the art to combine the member information database taught by Yonekura with the transmitter of admitted prior art, as modified by Xu et al. and Bryden et al., for the purpose of being able to find a convenient path for a packet when congestion on a network occurs.

Response to Arguments

5. Applicant's arguments with respect to claim1, 3-5, and 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or early communications from the Examiner should be directed to Salvador E. Rivas whose telephone number is (571)

270-1784. The examiner can normally be reached on Monday-Friday from 7:30AM to 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Huy D. Vu can be reached on (571) 272- 3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Salvador E. Rivas
S.E.R./ser

February 19, 2007

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